CHAPTER 2

AIR DETACHMENT EQUIPMENT SUPERVISOR

An air detachment (air det), as stated in the *U.S. Naval Mobile Construction Battalion (NMCB) Doctrine and Policy Governing,* OPNAVINST 5450.46, is part of a Naval Mobile Construction Battalion (NMCB) organization and is capable of deploying within 48 hours of notification. The mission of an air det is to provide contingency support for the Navy, Marine Corps, and other forces, and perform and participate in disaster recovery operations and field exercises (FEX). An air det has approximately 90 personnel assigned and contains airlift supplies, tools, and civil engineer support equipment (CESE) that can be airlifted to perform both horizontal and vertical construction. An air det must be self-sufficient for 30 days (600 construction hours) in all aspects, except that ammunition, rations, and POL are limited. When provided logistic support, an air det can operate independently of an NMCB for an indefinite period.

AIR DETACHMENT EQUIPMENT SUPERVISOR RESPONSIBILITIES

The type and amount of CESE embarked with an air det depends on the construction tasking and duration of the assigned mission. The officer in charge (OIC) of an air det is the equipment officer for the CESE assigned to the det; however, the daily management of CESE is the responsibility of the senior Alfa company rating assigned to the air det. This chapter presents the basic information required for you to perform your duties effectively when resigned as the air detachment equipment supervisor.

CREW ASSIGNMENTS

Personnel are assigned to the air det by the Battalion Operations Department, using the basic guidelines provided in the *Naval Construction Force Embarkation Manual,* COMSECOND/COMTHIRDNCBINST 3120.1 series. The ratings and number of personnel assigned to the air det are governed by the tasking of the mission.

The air det is organized into three platoons: an equipment platoon, a support platoon, and a construction (Builder) platoon.

The equipment platoon supervisor organizes the platoon and assigns military and job-related responsibilities. Job assignments are organized similar to an Alfa company operation. The job assignments are as follows: dispatcher, yard boss, collateral equipage/attachment custodian, license examiner, maintenance supervisor, shop supervisor, PM/cost control clerk, DTO clerk, technical librarian, floor mechanics, mechanic field crews, and project crews. Personnel may be assigned two or three job responsibilities, depending on the size of the platoon. These responsibilities are contained in *Equipment Management,* COMSECOND/COMTHIRDNCB-INST 11200.1 series, and are also covered in chapter 1 of this TRAMAN.

EQUIPMENT PLATOON ADMINISTRATION READINESS

Equipment platoon administration readiness is the process of storing at least a 30-day supply of all required forms and office supplies in a mount-out box or location. This allows you to manage the operations of an equipment platoon effectively in the event of an air det mount-out. The air det dispatcher, license examiner, and maintenance supervisor should store the following forms:

1. Dispatcher's Log, NAVFAC9-11240/2
2. Operator's Inspection Guide and Trouble Report, NAVFAC 9-11240/13
3. Operator's Daily PM Report, NAVFAC 9-11260/4
4. Motor Equipment Utilization Record, DD Form 1970
5. Collateral Custody Record Card, COM-SECOND/COMTHIRDNCB 60 Form
6. NAVSUP Form 1250
7. PM Record Card, NAVFAC 11240/6
8. Equipment Repair Order, NAVFAC 11200/41
9. Equipment Repair Order Continuation Sheet, NAVFAC 11200/41A
10. Operator's Identification Card, OF-346
11. Construction Equipment Operator's License, NAVFAC 11260/2
12. Application for Vehicle Operator's Identification Card, NAVFAC 11240/10

13. Application for Construction Equipment Operator's license, NAVFAC 11260/1
14. Physical Fitness Inquiry for Motor Vehicle Operators, SF-47
15. Construction Equipment Operator License Record NAVFAC 11260/3
16. Miscellaneous office supplies

Do not wait for notification of the air det to mount-out to start acquiring the required forms. If you do, you may find the dispatcher, license examiner, mechanic shop, or the supply department not having enough forms in stock to supply the needs for the daily operations of the equipment platoon.

TABLE OF ALLOWANCE (TOA)

The table of allowance (TOA) outfits the Naval Mobile Construction Battalion (NMCB) with the tools and equipment to perform construction operations under contingency conditions for 90 days (1,800 construction hours) without resupply; however, fuel and subsistence are limited to 15 days support, and construction materials are not part of the TOA. The area commander/project sponsor requiring the utilization of Seabees is responsible for the procurement and shipment of construction materials.

The Civil Engineer Support Office (CESO), Port Hueneme, California, is the system manager responsible for maintaining the Naval Construction Force (NCF) TOAs. CESO develops new allowances as directed by COMNAVFACENGCOM and collects field recommendations for revisions to existing TOAs. The TOA represents the best selection of tools and supplies needed to provide general construction capabilities, However, the TOA is not capable of meeting every operational requirement. When an assigned project requires tools or equipment in excess of the capability of the unit, the allowance must be supplemented by augmentation.

An NMCB TOA is divided into three echelons: the air detachment (TA41), air echelon (TA31) minus the air det, and sea echelon (TA22). The echelons are based on anticipated prioritization of personnel, material, equipment, and the availability of airlift versus sealift support.

The equipment platoon supervisor and the lead mechanic should review the TA41 and request the

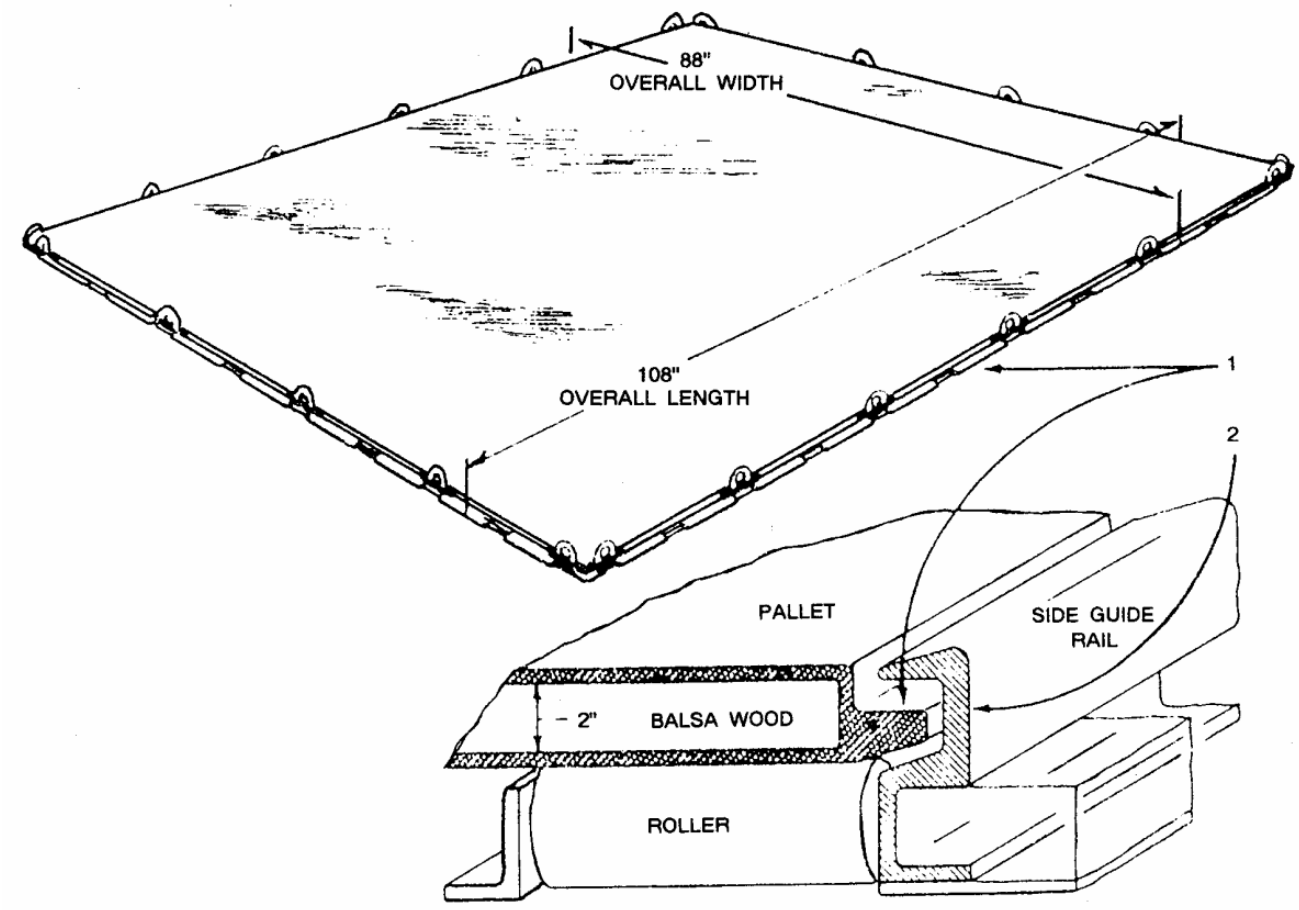

Figure 2-1.—Air Force 463L cargo pallet.

tools and supplies required to support the air det equipment platoon operation. Examples of these tools and supplies are aas follows: the kit 80013, mechanic hand look for two men; kit 80031, metric support tools; kit 80057, tire service tools (small); kit 80107, lubrication equipment and accessories. Do not forget other important items, such as a bundle of rags; a hand-operated fuel/oil dispensing pump for 55-gallon drums (commonly known in the NCF as a "hurdy-gurdy"); 55-gallon drums for fuel, oil cans, rigging gear, jumper cables; and tools for the field maintenance truck; and tools to support any construction tasking. The request list is forwarded through the air det chain of command and reviewed and approved by the battalion staff.

The lead mechanic is responsible for coordinating with the maintenance supervisor when requesting the NAVSUP modifier code 96, "repair parts common"; NAVS UP modifier code 98, "O level repair parts peculiar"; and petroleum oil lubricant (POL) products.

Normally, The TA41 kits and supplies are stored in a supply warehouse. During the 48-hour mount-out, the requested kits and supplies are drawn out and staged at the marshaling area. **FOLLOW UP** on the requested tools and supplies throughout the mount-out period. Overlooked and forgotten items can hamper a well-planned air det operation.

CESE REQUIREMENTS

The basic CESE allowance for an air det is contained in the TA41; however, the air det-assigned CESE for your deployment site is listed in the Equipment TAB A The organic CESE in the TAB A is divided into three echelons: AD for air det, AE for air echelon, and SE for sea echelon. CESE with like equipment codes (ECs) but different echelon can be changed to meet the needs of the air det.

The amount of CESE and supplies required for a mission is controlled by the availability of airlift, sealift, or over-the-road support. This requires the air det to preplan and prioritize all tasking and request only the amount of resources needed to accomplish the mission successfully. The knowledge and expertise of the equipment platoon supervisor enhances the ability of the air det to identify and request the required CESE, supplies, and POL for the air det mission. When identifying CESE, you should consider the following: convoy capabilities, equipment specifications, parts support, equipment conditions, and equipment aircraft certification and certifiability. Prioritize the CESE, supplies, and POL requirements. This allows the embarkation office to prepare aircraft load plans to meet the needs of the air det. Material and CESE requirements are discussed and approved by the battalion staff.

OPERATOR ASSIGNMENTS

Once the CESE list has been established, the equipment platoon supervisor must assign operators and co-drivers. Operators must stand by their assigned CESE that has been prepared and staged at the marshaling area for the joint inspection (JI). They are also required to accompany the assigned CESE throughout the transport to the mission site.

The staging and marshaling area is where equipment and materials are received. CESE is inspected for cleanliness and fluid leaks, mobile loads are completed, vehicles are weighed and marked for center of balance, cargo is palletized on the Air Force 463L cargo pallets (fig. 2-l), and cargo and CESE are placed into a configuration (chalk) for each aircraft (fig. 2-2).

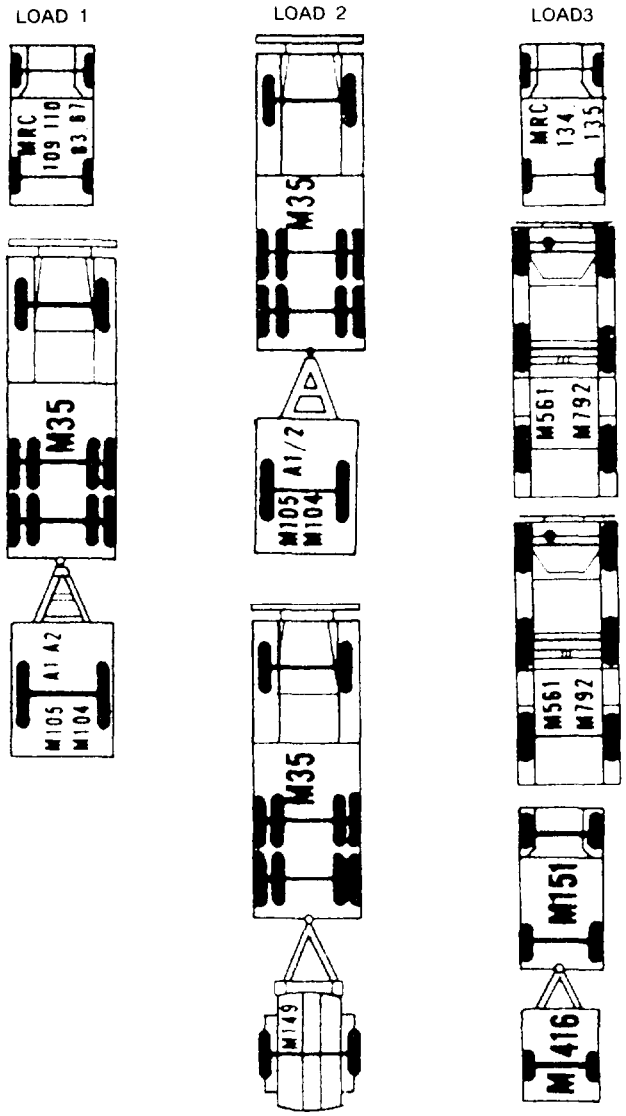

Figure 2-2.—Marshalling for C-130 and C-141 aircraft.

During the home-port period, a pre-JI is conducted before the JI by the battalion embarkation officer and the regiment embarkation staff from Port Hueneme, California, or Gulfport, Mississippi. When deployed overseas, the pre-JI is performed by COMSECOND/COMTHIRDNCB embarkation representatives. The pre-JI includes the inspection of all chalks of CESE, marriages and mobile loads of CESE, hazardous materials, and Special Handling Data/Certification (DD Form 1387-2) (fig. 2-3), and 463L pallet loads. The pre-JI allows the battalion time to correct any discrepancies before the main joint inspection (JI).

NOTE: Ensure members are licensed for CESE assigned. licenses can be checked during this inspection.

The JI is conducted by the battalion embarkation officer, regiment or COMSECOND/COMTHIRD-NCB representatives, and the combat cargo officer of a ship or, for aircraft, the Departure Airfield Control Element (DACE) in conjunction with the U.S. Air Force Airlift Control Element (ALCE). The joint inspection is recorded on the DD Form 2133 (fig. 2-4).

Information concerning the operations of the marshaling area or joint inspections are provided in the *MAC Affiliation Training Program Airlift Planners Course,* MAC pamphlet 50-13, and the *Naval Construction Force Embarkation Manual,* COMSECOND/COMTHIRDNCBINST 3120.1 series.

CESE AND MATERIAL PREPARATION

Upon notification of the air det to mount-out, the battalion re-organizes and sets up a mount-out control center (MOCC). The MOCC is under the direction of the battalion executive officer. The MOCC controls, coordinates, and monitors the movement of all personnel, supplies, and equipment to the marshaling area. The MOCC and the embarkation staff control all aspects of an NMCB mount-out and serve as the coordinating center for all the companies and battalion staff.

During this period, the battalion is normally organized into 12-hour shifts. Alfa company is responsible for all CESE preparation. The flow of the CESE through Alfa company is similar to the BEEP flow chart listed in chapter 1. During this time period, the air det is usually involved in briefings, medical and dental checkups, administration office checkups, and personnel readiness inspections. However, YOU need to schedule time to communicate with Alfa company, and **FOLLOW UP** on the status of CESE requested. Remember, the battalion is preparing CESE and supplies for the air det that you will have to live with.

Embarking on an aircraft requires special loading procedures for several types of CESE assigned to the battalion TOA. These procedures are outlined in the

ITEM NOMENCLATURE Sodium Aluminate Solution Corrosive Material Corrosive	NET QUANTITY PER PACKAGE 1 Gal CONSIGNMENT GROSS WEIGHT 10 lbs	TRANSPORTATION CONTROL NO. N00171022619O4XXX DESTINATION Washington Navy Yard DC
SUPPLEMENTAL INFORMATION This shipment is within the limitations prescribed for passenger aircraft. Neutralizing agent 5% Acetic Acid		LOAD STORAGE/GROUP 20 FLASH POINT NA

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Dept of Transportation. THIS IS A MILITARY SHIPMENT! *(Complete applicable blocks below)*

X	This shipment is within the limitations prescribed for PASSENGER AIRCRAFT/CARGO-ONLY AIRCRAFT (Delete nonapplicable aircraft)	ATA/IATA/IMCO REGULATIONS		
X	AFR 71-4, TM 38-250, NAVSUPPUB 505, MCO P4030.19, DLAM 4145.3, Paragraph 8-8a (2)	49 cfr	PARAGRAPH 173.7 (a)	EXEMPTION DOT-E 7573
	DOD 4500.32R (MILSTAMP)			
ADDRESS OF SHIPPER: Address		TYPED NAME, SIGNATURE AND DATE Name and Date		

DD FORM 1 MAY 79 1387-2 PREVIOUS EDITION IS OBSOLETE. SPECIAL HANDLING DATA/CERTIFICATION

Figure 2-3.—Special Handling Data/Certification, DD Form 1387-2.

JOINT AIRLIFT INSPECTION RECORD
(See Instructions on Reverse Side)

PAGE 1 OF 1 PAGES

1. UNIT BEING AIRLIFTED: 2/5 MAR	2. DEPARTURE AIRFIELD: LINDBERGH FIELD, S.D., CA	3. DATE (Day, Month, Year): 10 Oct 85

4. TYPE, MODEL, SERIES AIRCRAFT AND SERIAL NO: C 141B	5. MISSION NUMBER: GK S-109	6. LOAD CHALK NO: 3	7. TIME COMPLETED: 17:52	8. ALCE ACT: 63 MAW

LEGEND *(Mark blocks after each item as follows)*: ✓ = SATISFACTORY X = UNSATISFACTORY *IF NOT APPLICABLE - LEAVE BLANK*

INCREMENT SERIAL BUMPER NUMBER AND TYPE

Item	TRK HQ13	TRL HQ13T	MC TRK 3306	MC TRL 4712	MC GUN 1114	MC TRK 4010	MC GOAT 7277	MC G.TRL 3606	PLT 13			
A. DOCUMENTATION												
9. MANIFESTS / NUMBER OF COPIES	✓	✓	✓	✓	✓	✓	✓	✓	✓			
10. DD FORM 1387-2 *(As required)*	✓	✓	✓	✓	✓	✓	✓	✓	✓			
11. HAZARDOUS CARGO COMPATIBILITY	✓	✓	✓	✓	✓	✓	✓	✓	✓			
12. LOAD LISTS / CUSTODIAN TRANSFER FORMS	✓	✓	✓	✓	✓	✓	✓	✓	✓			
B. VEHICLES / NON-POWERED EQUIPMENT												
13. CLEAN	✓	✓	✓	✓	✓	✓	✓	✓				
14. FLUID LEAKS	✓	✓	✓	✓	✓	✓	✓	✓				
15. MECHANICAL CONDITION												
a. ENGINE RUNS	✓		✓			✓	✓					
b. BRAKES OPERATIONAL	✓	✓	✓	✓	✓	✓	✓	✓				
16. BATTERY												
a. SECURE - NO LEAKS	✓		✓			✓	✓					
b. IF DISCONNECTED - POST / CABLES TAPED						✓	✓					
17. FUEL TANK(S)												
a. ONE-HALF (1/2) TANK	✓		✓			✓	✓					
b. ONE-FOURTH (1/4) TANK												
c. DRAINED *(As required)*		✓										
d. FUEL TANK CAPS INSTALLED	✓	✓	✓			✓	✓					
18. JERRY CANS *(Secure, Fuel Level, Seals)*	✓					✓	✓					
19. DIMENSIONS *(Fits A/C Profile or Contour)*	✓	✓	✓	✓	✓	✓	✓	✓				
20. CENTER OF BALANCE *(Both Sides)*	✓	✓	✓	✓	✓	✓	✓	✓				
21. SCALE WEIGHT *(Both Sides)*	✓	✓	✓	✓	✓	✓	✓	✓				
22. AXLE WEIGHTS *(Both Sides)*	✓	✓	✓	✓	✓	✓	✓	✓				
23. TIEDOWN POINTS *(Serviceable)*	✓	✓	✓	✓	✓	✓	✓	✓				
24. PINTLE HOOKS / CLEVISES												
a. SERVICEABLE	✓		✓			✓	✓					
b. SAFETY PIN ATTACHED	✓					✓	✓					
25. VEHICLE EQUIPMENT SECURE *(Tools, tires, antennas, etc.)*	✓	✓	✓		✓	✓	✓					
26. LOX / NITROGEN CART *(Vent Kit)*												
27. TIRE PRESSURE	✓	✓	✓		✓	✓	✓	✓				
28. SHORING *(Rolling, Parking, Sleeper)*					✓							
29. ACCOMPANYING LOAD												
a. WITHIN VEHICLE RATED CAPACITY	✓	✓	✓	✓	✓	✓	✓	✓				
b. SECURE TO VEHICLE	✓	✓	✓	✓	✓	✓	✓	✓				
C. PALLETS												
30. CLEAN									✓			
31. SCALE WEIGHT *(88 Inch Side)*									✓			
32. DIMENSIONS *(Fits A/C Profile or Contour)*									✓			
33. CARGO PROPERLY SECURED												
a. NETTED									✓			
b. CHAINED												
34. DUNNAGE *(3 Pcs Per Pallet)*									✓			
D. HELICOPTERS *(Flyaway)*												
35. BATTERY *(Disconnected/Taped)*												
36. FUEL QUANTITY *(Gallons)*												
37. CENTER OF BALANCE *(Both Sides)*												
38. SCALE WEIGHT *(Both Sides)*												
39. SHORING *(Rolling, Parking)*												
40. SPECIAL LOADING EQUIPMENT												

41. REMARKS

The above listed vehicles / non-powered equipment have been inspected for proper shipping configuration in accordance with Chapter 3, AFR 71-4, TM 38-250 / NAVSUP PUB 505 (REV) / MCO P4030 19D / DLAM 4145 3.

42. TRANSPORTED FORCE INSPECTOR *(Signature Rank Unit of Assignment)*: Walter E. Walder, MGySgt, 1MAR DIV	43. TRANSPORTATION FORCE INSPECTOR *(Signature Rank Unit of Assignment)*: Danny A. Freighter, SGT, 63 AES

DD Form 2133, NOV 86 *Previous editions are obsolete*

Figure 2-4.—Joint Airlift Inspection Record, DD Form 2133.

Naval Construction Force Embarkation Manual, COMSECOND/COMTHIRDNCBINST 3120.1 series. Alfa company is responsible for following these procedures that include the following: the removal of dump truck headache racks, equipment exhaust stacks, dozer blades, counterweights, and equipment roll over protective structure (ROPS). Also, the fuel tank of a vehicle to be embarked by airlift must be between one-fourth and three-fourths full; however, when the vehicle has to be placed on the ramp inside the aircraft, the fuel tank should never be more than one-third full. Accomplishment of these procedures is a major area of responsibility for the air det equipment platoon; therefore, make sure you know where Alfa company placed the bolts, nuts, and parts for the disassembled equipment because the air det will be required to reassemble these items on site.

After the CESE is cleaned, inspected, and serviced by Alfa company, the dispatcher notifies the MOCC that the CESE is ready to be transferred to the Weighing and Marking station.

WEIGHING AND MARKING

To plan an airlift and to break down loads for individual aircraft correctly, you must determine the weights and center of balance (C/B) of the two main divisions: vehicles and general cargo.

The weight and center of balance of vehicles are determined with secondary loads (mobile loads) mounted. Mobile loads are items of baggage or cargo transported in truck beds and trailers that must be included in the total weight of a vehicle. To determine the center of balance (C/B) on a vehicle, the 20th Naval Construction Regiment Embarkation Staff (R23), Gulfport, Mississippi, recommends the following procedures:

Step 1. Establish the reference datum line (RDL). The RDL is the farthest forward point of a vehicle.

Step 2. Measure distance 1 (D1). D1 is the measurement in inches from the RDL to the center line of the front axle.

Step 3. Measure distance 2 (D2). D2 is the measurement in inches from the RDL to the center line of the intermediate axle or rear axle.

NOTE: The distance 2 measurement location for vehicles with tandem axles is measured from the RDL to the trunnion.

Step 4. Measure distance 3 (D3). D3 is the measurement in inches from the RDL to the center line of the rear axle. This step is performed on vehicles that have three or more axles and on towed vehicles that will remain married (attached) to a vehicle when loaded on the aircraft. The axles on a towed vehicle will become D4, D5, and so forth (fig. 2-5).

To perform Steps 5, 6, and 7, drive the vehicle onto portable scales (fig,. 2-6) placed under the tires on each axle.

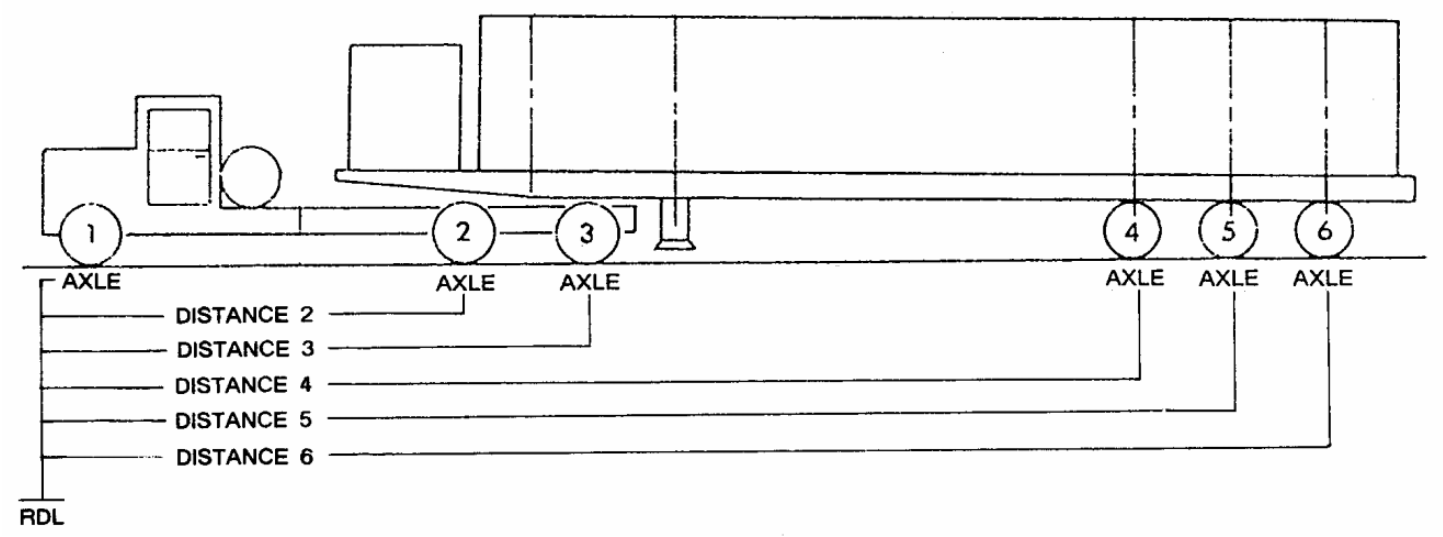

Figure 2-5.—CESE distance measurement locations.